Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23.   (Cancelled)

24.   (Cancelled)

25. (Currently amended) A method for controlling flow of data packets in a computer system, the method comprising:

receiving data packets <u>at a central system</u> from one of a plurality of pipes in the computer system for processing, <u>each of the plurality of pipes connecting a different client system to the central system,</u> the data packets being received during a time interval specific to the one pipe, each of the plurality of pipes in the computer system having a different time interval <u>during which associated data packets are received</u>;

examining the data packets to determine whether to transmit the data packets on <u>only one of</u> a first path <u>and</u> <s>or on</s> a second path in the computer system such that none of the data packets are dropped before being outputted, the first path having a first storage <u>that is a first type of storage,</u> and the second path having a second storage <u>that is a second type of storage</u>, the first <u>type of</u> storage being smaller in size and faster in speed than the second <u>type of</u> storage<u>, wherein only the first type of storage is used to store the data packets on the first path and only the second type of storage is used to store the data packets on the second path</u>; and

forwarding the data packets to <u>only one of the first storage and the second storage based on examination of the data packets,</u> the first storage <u>being</u> for transmission on the first path <u>and not the second path,</u> <s>or to</s> <u>and</u> the second storage <u>being</u> for transmission on the second path <u>and not the first path</u> <s>based on examination of the data packets</s>, all of the data packets received during the time interval being transmitted on a same path.

26. (Previously Presented) The method of claim 25, further comprising:

queuing the data packets received during the time interval in a memory of the computer system prior to examination of the data packets, wherein every data packet received from any pipe in the computer system is queued in the memory of the computer system before being examined.

27. (Currently amended) The method of claim 25, further comprising:

storing the data packets transmitted on <u>only one of</u> the first path [[or]] <u>and</u> the second path in an output storage of the computer system prior to outputting the data packets, wherein every data packet transmitted on any path in the computer system is stored in the output storage of the computer system before being outputted.

28. (Previously Presented) The method of claim 27, further comprising:

outputting the data packets from the output storage of the computer system in an order in which the data packets were received for processing, wherein every data packet outputted from the output storage of the computer system is outputted in an order in which the data packet was received for processing.

29. (Currently amended) The method of claim 25, wherein forwarding the data packets to <u>only one of</u> the first storage <s>for transmission on the first path or to</s> <u>and</u> the second storage <s>for transmission on the second path</s> based on examination of the data packets comprises:

forwarding the data packets to the second storage for transmission on the second path responsive to occupation of data packets from the one pipe in the first storage being greater than a threshold set for the one pipe during a previous time interval specific to the one pipe.

30. (Currently amended) The method of claim 25, wherein forwarding the data packets to <u>only one of</u> the first storage <s>for transmission on the first path or to</s> <u>and</u> the second storage <s>for transmission on the second path</s> based on examination of the data packets comprises:

forwarding the data packets to the second storage for transmission on the second path responsive to

occupation of data packets from the one pipe in the first storage being less than or equal to a threshold set for the one pipe during a previous time interval specific to the one pipe,

the second storage containing at least one data packet from the one pipe during the previous time interval specific to the one pipe, and

data packets from the one pipe having been transmitted on the second path during the previous time interval specific to the one pipe.

31. (Currently amended) The method of claim 25, wherein forwarding the data packets to <u>only one of</u> the first storage ~~for transmission on the first path or to~~ <u>and</u> the second storage ~~for transmission on the second path~~ based on examination of the data packets comprises:

forwarding the data packets to the first storage for transmission on the first path responsive to

occupation of data packets from the one pipe in the first storage being less than or equal to a threshold set for the one pipe during a previous time interval specific to the one pipe, and

the second storage not containing any data packet from the one pipe during the previous time interval specific to the one pipe.

32. (Currently amended) The method of claim 25, wherein forwarding the data packets to <u>only one of</u> the first storage ~~for transmission on the first path or to~~ <u>and</u> the second storage ~~for transmission on the second path~~ based on examination of the data packets comprises:

forwarding the data packets to the first storage for transmission on the first path responsive to

occupation of data packets from the one pipe in the first storage being less than or equal to a threshold set for the one pipe during a previous time interval specific to the one pipe,

the second storage containing at least one data packet from the one pipe during the previous time interval specific to the one pipe, and

data packets from the one pipe not having been transmitted on the second path during the previous time interval specific to the one pipe.

33. (Previously Presented) The method of claim 25, wherein the time interval specific to the one pipe is proportional to a storage capacity of the first storage for the one pipe divided by a maximum possible arrival rate of data packets for the one pipe.

34. (Previously Presented) The method of claim 33, wherein the time interval specific to the one pipe is one-eighth of the storage capacity of the first storage for the one pipe divided by the maximum possible arrival rate of data packets for the one pipe.

35. (Previously Presented) The method of claim 33, wherein the time interval specific to the one pipe is no more than one-half of the storage capacity of the first storage for the one pipe divided by the maximum possible arrival rate of data packets for the one pipe.

36. (Previously Presented) The method of claim 25, further comprising:

setting a transmission signal for the one pipe to one when the data packets received from the one pipe are forwarded to the first storage for transmission on the first path.

37. (Previously Presented) The method of claim 25, further comprising:

setting a transmission signal for the one pipe to zero when the data packets received from the one pipe are forwarded to the second storage for transmission on the second path.

38. (New) The method of claim 29, wherein the threshold is set such that the threshold plus the maximum possible input rate for the one pipe multiplied by the time interval specific to the one pipe, is less than a storage capacity of the first storage for the pipe.